WEST LAKE LANDFILL SUPERFUND SITE (MISSOURI)

ISSUE SUMMARY:

The West Lake Landfill Superfund site in Bridgeton, Missouri, contains radiologically impacted material (RIM) from the Manhattan Project and has been the subject of considerable public interest from local community groups and their elected representatives. EPA is overseeing the design of two remedies being conducted by potentially responsible parties (PRPs); one is a remedy design for the area where RIM is located and the second is for an area of the site not impacted by RIM. EPA is also overseeing a remedial investigation and feasibility study of groundwater conducted by the PRPs.

UPCOMING MILESTONES:

A design investigation for the areas containing RIM will be completed in late Spring 2021. Information from this investigation is vital to completion of the remedial design of the remedy for this portion of the site, which is to be completed in 2022. The remedial design for the areas not impacted by RIM is also due to be completed in 2022.

BACKGROUND:

West Lake Landfill is a former sanitary landfill that closed in the 1970s. In 1973, a now-defunct trucking company mixed soil with a low-level radioactive material called leached barium sulfate and brought it to the landfill as "clean fill" material. The landfill used the material to mainly cover compacted trash in two areas of West Lake Landfill as part of routine operations. Located near the St. Louis Lambert International Airport, the site is surrounded by commercial/industrial facilities with residential areas less than a mile away and the Missouri River approximately two miles to the west. EPA added the site to the Superfund National Priorities List in 1990. The site includes three operable units (OU-1, OU-2 and OU-3), and descriptions of each OU follows.

OU-1 is comprised of two areas where 8,700 tons of RIM from the Manhattan Project mixed with approximately 38,000 tons of soil were used as daily cover for refuse in the landfill operations in 1973. The PRPs for OU-1 are Bridgeton Landfill LLC, Cotter Corporation, and the U.S. Department of Energy (DOE).

In 2008, EPA issued a Record of Decision (ROD) for OU-1 that called for construction of an engineered landfill cover over the RIM. In response to community requests to reconsider this approach and recommendations from the National Remedy Review Board, EPA required the PRPs to perform additional work to support consideration of a full range of remedial alternatives at OU-1, including leaving all of the RIM in place, partial excavation, and full excavation.

On September 27, 2018, a Record of Decision Amendment (RODA) for OU-1 was signed by Acting Administrator Wheeler. This RODA changed the remedy for OU-1 from leaving all RIM in place and construction of an engineered cover to one that requires partial excavation of the RIM with offsite disposal and construction of an engineered cover system. In May 2019, EPA finalized an enforceable agreement with the PRPs to conduct the remedial design necessary to implement the RODA. The remedial design is underway with completion planned for late Spring 2022.

OU2 includes three former landfills not impacted by RIM, including the inactive Bridgeton Landfill, an unnamed inactive sanitary landfill and a construction and demolition landfill. The PRP for OU-2 is Bridgeton Landfill LLC. The inactive Bridgeton Landfill is a permitted municipal waste landfill under state jurisdiction. An ongoing subsurface reaction has been occurring in the Bridgeton Landfill since 2010 and is located more than 700 feet from the RIM. (Also referred to as a "subsurface smoldering event," which is a chemical reaction similar to an underground fire).

In 2008, EPA issued a ROD for OU2 that selected a cover remedy for the remaining inactive sanitary landfill and deferred remediation of the Bridgeton Landfill and the former construction and demolition landfill to the state of Missouri's solid waste program. In 2013, the state of Missouri filed a lawsuit against Bridgeton Landfill for violations of environmental laws and is requiring the company to monitor and address the movement of the underground chemical reaction in the state-lead Bridgeton landfill. EPA is overseeing the PRP's design of the OU2 remedy at the inactive sanitary landfill.

OU-3 is comprised of the site's groundwater. The groundwater is not currently used as a drinking water source . In February 2019, EPA finalized an enforceable agreement with the PRPs to conduct a remedial investigation and feasibility study of sitewide groundwater. The PRPs for OU-3 are Bridgeton Landfill LLC, Cotter Corporation, and the U.S. DOE. The remedial investigation is currently underway. Groundwater monitoring is planned to continue for a minimum of two years before a decision is made regarding the need for a remedial action for groundwater.

KEY EXTERNAL STAKEHOLDERS:

☒ Congress ☐ Industry ☒States ☐ Tribes ☒ Media ☒ Other Federal Agency
☐ NGO ☒ Local Governments ☒ Other (name of stakeholder) Community groups

There is a significant level of interest by congressional, media, and community members regarding implementation of the remedy for OU-1 and investigation of groundwater.

MOVING FORWARD:

Work on the remedial designs of the remedies for OUs 1 and 2 will continue. The remedial investigation of groundwater (OU-3) will continue with installation of additional monitoring wells and groundwater sampling. EPA plans to hold the PRPs accountable for meeting deadlines on this work and oversee the field investigations occuring to ensure they are performed as approved and according to all safety protocols. While remedial design at OU-1 and OU-2 are ongoing, EPA is also actively engaging the PRPs in discussions regarding implementation of the remedial actions after the designs are complete.

EPA has developed and continues to aggressively use several tools for communication with the community including publication of all reviewed documents on the West Lake Site Profile Page, publishing West Lake Update newsletters, and holding in-person and virtual meetings with the Technical Committee of the Community Advisory Group.

LEAD OFFICE/REGION: REGION 7 OTHER KEY OFFICES/REGIONS: OLEM/OECA/OGC/ORD